



HDAC8 Assay Kit

Product Information

Cat.No.

Kit-0434

Product Overview

HDAC8 Assay Kit is use for measuring the amount of HDAC1.

Description

Histone deacetylases (HDACs) play a critical role in transcriptional repression of the gene expression in eukaryotic cells through catalyzing the hydrolytic removal of acetyl groups from histone lysine residues. HDACs are tightly involved in cell cycle regulation, cell proliferation and in development of human cancer. HDAC inhibition displays significant effects on apoptosis, cell cycle arrest and differentiation in cancer cells. HDAC inhibitors are currently being developed as potential anticancer agents. Three distinct families of HDACs have been described, comprising a group of at least 20 proteins in humans. HDAC8 is a class I histone deacetylase containing 377 amino acid residues. HDAC8 has been shown to interact directly with transcription factors and has been shown to deacetylate histone proteins H3 and H4. The major assay for measuring the expression or amount of HDAC8 protein currently is the Western blot. This method requires electrophoresis and transfer process, which makes the assay inconvenient, time consuming, and has low throughput. The HDAC8 Assay Kit addresses these problems by using a unique procedure to measure amount of HDAC8.

Applications

For measuring HDAC8 levels from various fresh tissues and cultured mammalian cells.

Usage

For research use only (RUO)

Storage

Upon receipt, store HC5 and HDAC8 control at -20°C. Store HC3, HC4, HC6 and 8 well assay strips at 4°C away from light. Store all other components at room temperature. The components of the kit should be stable for 6 months when stored properly. Note: Check if wash buffer, HC1, contains salt



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precipitates before using. If so, warm (at room temperature or 37°C) and shake the buffer until the salts are re-dissolved.

Kit Components

HC1 (10X wash buffer) 22 ml HC2 (HDAC assay buffer) 2 ml HC3 (blocking buffer) 20 ml HC4 (capture antibody 200 µg/ml)* 26 µl HC5 (detection antibody 200 µg/ml)* 20 µl HC6 (developing solution) 12 ml HC7 (stop solution) 6 ml HDAC8 control (100 ng/µl)* 24 µl 8 well assay strip (with frame) 12* For maximum recovery of the products, centrifuge the original vial after thawing prior to opening the cap.

Features & Benefits

The fastest procedure, which can be finished within 3 hours. Innovative colorimetric assay to semi-quantitatively measure HDAC8 amount with no need of electrophoresis. Strip microplate format makes the assay flexible: manual or high throughput analysis. Simple, reliable, and consistent assay conditions.
